

Abstract of the Disclosure

5 A high temperature viscosifying and fluid loss controlling additive for use in well cements, well cement compositions including the additive and methods of using the compositions are provided. The well cement compositions of this invention are comprised of a hydraulic cement, water and a viscosifying and fluid loss controlling additive comprising a mixture of a polymer comprised of at least one monomer which is

10 calcium tolerant, anionic and disperses basic cement slurries, at least one monomer which hydrolyzes in basic cement slurries to generate anionic carboxylate groups that bind with calcium and viscosify the slurries and at least one monomer which generates non-ionic pendant groups on the polymer upon hydrolyzing in basic cement slurries to prevent polymer precipitation and a homopolymer of a monomer which hydrolyzes in basic

15 cement slurries to generate anionic carboxylate groups that bind with calcium, viscosify the slurries and prevent settling in the slurries.